INNOVATIVE FINANCING FOR WASTE MANAGEMENT

Peran BPDLH dalam Mendukung Pertumbuhan Ekonomi dan Pembangunan Berkelanjutan Jakarta sebagai Kota Global

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TARGET PENURUNAN EMISI INDONESIA

Indonesia menargetkan Net Zero Emission (NZE) pada tahun 2060 atau lebih cepat. Dalam dokumen Second Nationally Determined Contribution (SNDC), target iklim Indonesia bertransisi dari target berbasis persentase menuju target emisi absolut, dengan target pengurangan emisi hingga 1,5 ggton CO2eq pada tahun 2035

Lingkungan merupakan isu lintas sektoral

Kolaborasi Antarsektor Kementerian/Lembaga & Dareah

Mekanisme Pendanaan Berkelanjutan

GROWING SCHEME FINANCING

Skema pendanaan BPDLH berfokus pada pendekatan *blended finance* dengan memadukan dana publik, swasta, filantropi, dan internasional untuk mendukung usaha perhutanan sosial, transisi energi, **ekonomi sirkular dan waste management**, ketahanan pangan dan bencana.

Line Minister/Program Owner

FUND OWNER

- Donor
- Philanthropy
- Private
- State Budget

USD 1.51 Billion

GCF · Norway · World Bank · UNDP · UNCDF · GGGI · CLUA · Ford Foundation · GIZ · KfW · UK · APBN

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- AFOLU & Sustainable Ecosystem
- Just & Affordable Clean Energy
- Circular Economy & Zero Waste Emission
- Health, Water, & Food Security
- Climate & Disaster Resilience

bpdlh

- **Hibah**
  - Penerima Manfaat
- **Investasi**
  - Concessional
  - Blended
  - Commercial

FINANCING CLUSTER – WASTE MANAGEMENT

Ekosistem pembiayaan pengelolaan sampah menghubungkan modal, aktor, kerangka kebijakan, dan kapasitas implementasi untuk mendukung target pengurangan sampah dan ekonomi sirkular Indonesia, serta mekanisme pendukung yang memungkinkan pemangku kepentingan nasional dan lokal untuk mengakses dan memanfaatkan dana lingkungan untuk mengurangi, mengumpulkan, mendaur ulang, dan mengelola sampah secara berkelanjutan dan sirkular.

UPSTREAM

- Revolving Fund -
- Community Fund Services -
- Derisking (guarantee inst.) -

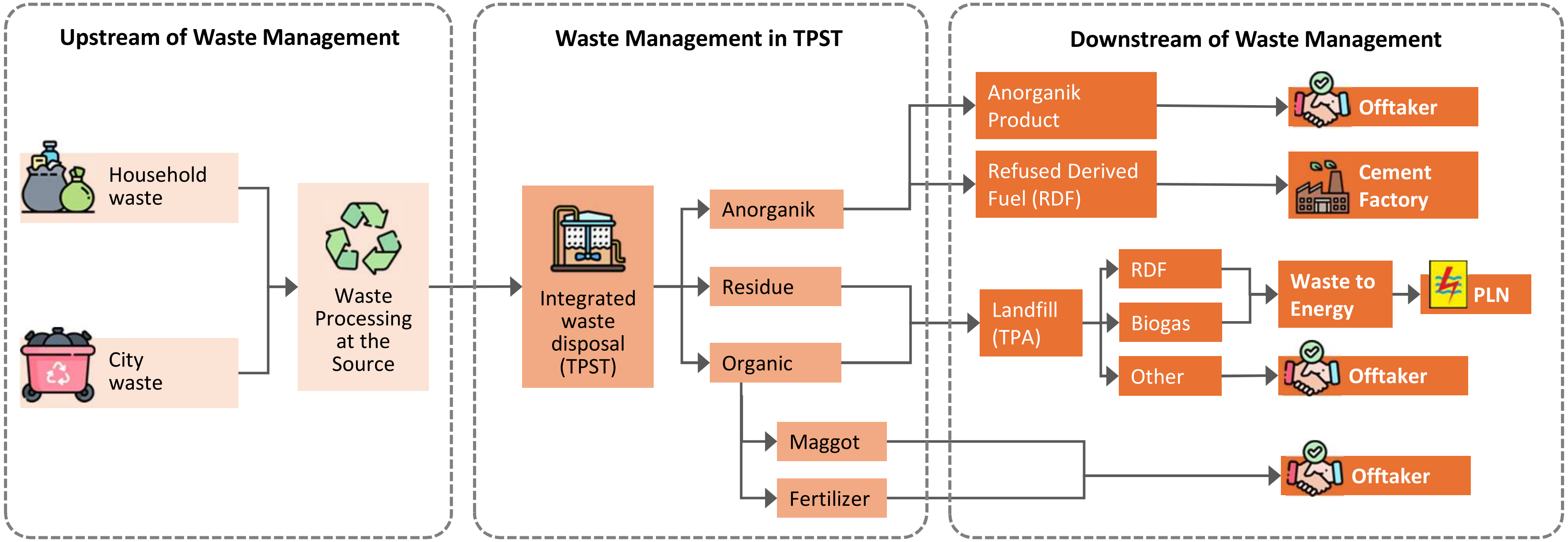
SHIFTING

- State Budget -
- Catalytic Fund -

DOWNSTREAM

- **Mitigation Outcome -**
- **Low Carbon Development Initiative -**
- **Smart Green ASEAN Cities (SGAC) -**

(Part of RDF plant installment)*



Electricity from waste for supply of mix renewable energy

KEMENTERIAN KEUANGAN
REPUBLIK INDONESIA

bpdlh
badan pengelola dana lingkungan hidup

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FINANCING CLUSTER – SOCIAL FORESTRY

financing ecosystem for social forestry is a holistic system that combines funding mechanisms, institutional collaboration, market linkages, and governance processes to enable community forest managers to access capital, contribute to conservation and climate goals, and develop sustainable businesses.

UPSTREAM

- Social Forestry Permit & its technical verification
- Boundary marking
- Recognition of Adat Community
- Social Forestry Business Plan (RKPS)
- Strengthening Social Forestry Class & Upscaling its grade
- Institutional strengthening, KUPS is directed to be cooperative
- Information system of social forestry (GoKUPS

Terra Program (Ford Foundation & CLUA)
FOLU Net Sink (Norway)
RBP REDD+ 2014-2016 (GCF)
Environmental Investment Program (UK FCDO - GGGI)

SHIFTING

- Operating the social forestry business

Revolving Fund (State Budget/APBN)

DOWNSTREAM

- **Access to funding through the private sector**

Blended Finance (UK FCDO - GGGI)

Increasing Value added of Social Forestry Product

Scale up of production

Export of the commodity

Market **expansion**

FINANCING CLUSTER – BIODIVESITY

Financing ecosystem for biodiversity provide the integrated system of funding sources, financial mechanisms, institutions, processes, and support structures designed to mobilize, manage, and distribute environmental funds to protect, restore, and sustainably use Indonesia's biodiversity.

UPSTREAM

ENABLING CONDITION

- Strengthening legal framework of biodiversity conservation: umbrella & sectoral regulation
- Institutional Capacity, etc

ACTION

- Biodiversity Conservation: forestry, marine & fisheries, including genetic resources

PUBLIC FUND

- **Ibiofund** (still focus on forestry sector)
- **Coral Bond** (interest of the bond)
- **FOLU Fund** (biodiversity as part of component of FOLU)

SHIFTING

ENABLING CONDITION

- Research and Development

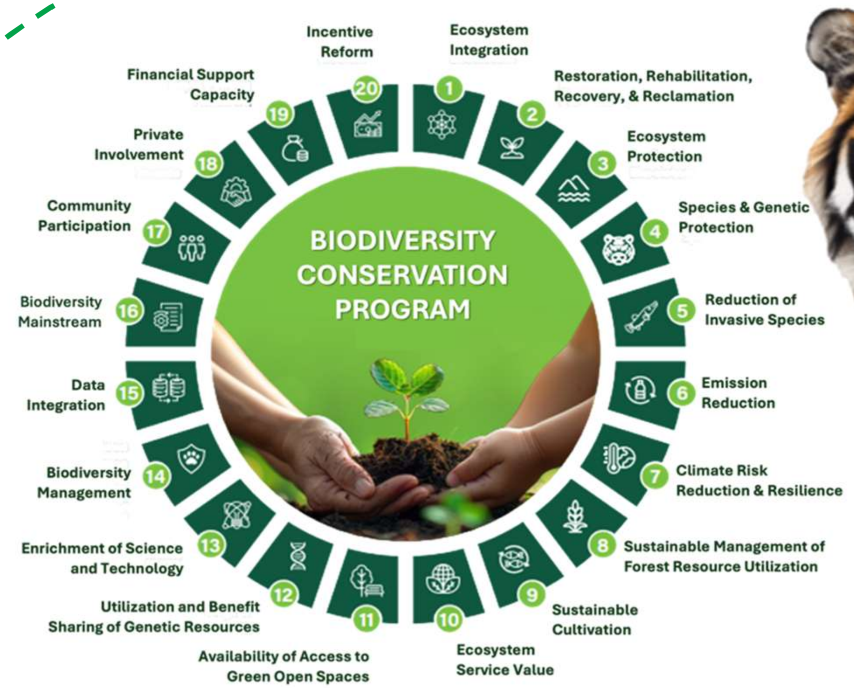
ACTION

- Economic benefit utilization

DOWNSTREAM

- Industrialization and/or Commercialization

BLENDED FINANCE



FINANCING CLUSTER – CARBON

Financing ecosystem for carbon in BPDLH is coordinating system of funding sources, financial instruments, institutions, governance processes, and support mechanisms that mobilizes and manages climate financing to reduce emissions, enhance carbon sequestration, and support Indonesia's carbon market and climate mitigation goals.

UPSTREAM

PUBLIC FUND
(Grant)

- Preparation Market Implementation (PMI)
- Mitigation outcome for DRAM development (energy sector)

- **Enabling Condition**
  - legal framework
  - relevant instruments (MRV, SRN)
  - increasing the capacity
- **Institutional arrangement**
- **Communication Strategy**

Policy creates demands for carbon

MITIGATION ACTION

PUBLIC FUND
(Grant & Revolving Fund)

- Pre-investment (RBP GCF, FCPF, Norway Cooperation)
- Low carbon development initiative (LCDI Phase 2 - ITF
- Mangrove restoration & rehabilitation

- Mitigation actions **from various sector**
- **mobilizes and channels** carbon-related funds from multiple streams

Supply for Carbon

DOWNSTREAM

BLENDED FINANCE
(Market & Non Market Scheme**)**

ensuring benefit-sharing mechanisms, and providing financial instruments that enable carbon credits to be traded effectively in downstream carbon markets.

Sustainable Carbon Market

FINANCING CLUSTER – DISASTER RESILIENCE

Financing ecosystem for disaster resilience di covers the entire process of preparing a policy framework, designing financing instruments, risk planning, readiness programs, and mobilizing funding that enable the disaster resilience funding system to run effectively.

UPSTREAM

Focus on systems, foundations and mechanisms that **enable disaster resilience funds to flow effectively**

- Policy & Regulatory Framework
- Financing Instrument Development
- Risk Assessment and Planning
- Capacity Building & Readiness
- Partnerships & Fund Mobilization

DOWNSTREAM

Focus on program implementation, fund utilization, monitoring, results, and long-term utilization.

- Fund Distribution and Implementation
- Community-Based Programs
- Monitoring, Reporting, & Verification
- Risk Management & Safeguards
- Learning & Reinvestment

POOLING FUND BENCANA

Community Resilience Revolving Fund Facility **(CRRFFF)**

FINANCING CLUSTER – BLUE CARBON

The integrated funding system managed by BPDLH supports the protection, restoration, and sustainable use of marine and coastal ecosystems through a combination of funding sources, financial instruments, supporting institutions, governance, and technical infrastructure that ensures the long-term sustainability of the “blue economy” sector.

UPSTREAM

Ensuring the funding ecosystem is ready to go, clear regulation, built capacity, funding available

- Mangrove for **Coastal Resilience** (M4CR)
- **Revolving Fund**

MIDSTREAM

BPDLH funds “work on the ground” to improve ecosystems and increase the blue economy.

- **Catalytic Fund** for Leveraging Impact

DOWNSTREAM

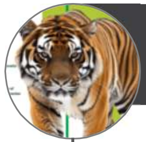
Ensuring that economic, ecological, social & climate benefits are realized and that funds can be recycled

- Coral Reef **Bonds**
- Coral Reef **Insurances**

INTEGRATED FINANCING ECOSYSTEM NATURE - BASED SOLUTIONS

Financing ecosystems for NbS can be implemented by integrating planning (**upstream**), coordinating multi-sectoral funding distribution in the field (**midstream**), and monetizing cross-sectoral benefits and sharing them equitably (**downstream**). Integrating funding for social forestry, biodiversity, carbon, and disaster resilience allows a single ecosystem restoration or protection activity to simultaneously generate climate, economic, social, and disaster risk reduction benefits.

Social Forestry



Biodiversity

Carbon

Disaster Resilience

FINANCING ECOSYSTEM FOR NBS

UPSTREAM

INTEGRATED PLANING
- Sforestry map
- Conservation area map
- Disaster ocial risk map

POLICY HARMONIZATION
- Kemhut (forests, biodiversity)
- KLH (carbon)
- BNPB (disaster resilience)

COMBINED INSTRUMENT DESIGN
- **Blended finance (NbS)** (grants + loans + carbon revenue)
- **Bundled ecosystem services financing** (carbon + biodiversity + flood mitigation)
- Multi-benefit **Payment for Ecosystem Services** (PES)

MIDSTREAM

INTEGRATED AREA IMPLEMENTATION
- social forestry → agroforestry → carbon stock → biodiversity protection → landslide/flood reduction.
- mangrove → carbon sequestration → nursery fish habitat → coastal protection

INTER-CLUSTER SAFEGUARDS
- Social Safeguards
- Biodiversity Safeguards
- Climate & Carbon Safeguards
- Disaster Risk Safeguards

DOWNSTREAM

MONETIZATION & REVENUE GENERATION
Sale of blue carbon credits, Payment for coastal ecosystem services, Revenue from blue businesses

BENEFIT SHARING
Economic benefits to coastal communities, local governments, & ecosystem managers

IMPACT & EVALUATION
habitat protection, coastal disaster risk reduction, local economic improvement,

REINVESTMENT & SCALLING-UP
expand the economy, blue carbon and coastal restoration projects, improve MRV and governance

BPDLH manages the financial architecture so that the entire funding ecosystem works sustainably